



UNITED STATES PATENT AND TRADEMARK OFFICE

CV
UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/526,737

03/04/2005

Enrico Cinti

37891

7870

116 7590 04/26/2007

PEARNE & GORDON LLP
1801 EAST 9TH STREET
SUITE 1200
CLEVELAND, OH 44114-3108

EXAMINER

TRAN, SUSAN T

ART UNIT

PAPER NUMBER

1615

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
--	-----------	---------------

3 MONTHS

04/26/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/526,737

Applicant(s)

CINTI ET AL.

Examiner

Susan T. Tran

Art Unit

1615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 26-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 26-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 26-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 26 recites the limitation "reaction between metal (II) oxides and MHA and/or its salts " in lines 9-10. There is insufficient antecedent basis for this limitation in the claim. Does "metal oxide" mean the "bivalent metal cation"? The limitation "MHA salts" was not mentioned in line 5.

Claim Rejections - 35 USC § 103

Claims 26-29, 33, 34 and 36-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ciribolla WO 00/53032.

Ciribolla teaches a feed additive for agro-zootechnical use, in particular for alimentary use in the zootechnical sector. The additive comprises a reaction of methionine hydroxyl analogue (MHA) with the carbonate of bivalent metal in the presence of water (abstract; and page 6). Bivalent metal includes Zn, Ca, Cu, Co, Mn, Mg, and Fe (page 6; and page 9, lines 21-22). Ciribolla also teaches a method of treating animal by administering the feed additive to the animal (page 4, lines 20 through page 5, lines 1-19).

The examiner noted the present of the carbonate in the reaction. However, the present claims recite the transitional phrase "comprising of", and therefore, does not preclude the present of the CO₂ in the reaction.

Further, the examiner is unable to determine the unexpected result in the claimed method over those that taught by Ciribolla, which comprises a direct reaction of MHA with a carbonate of bivalent metal. Thus, it would have been obvious to one of ordinary skill in the art to modify the method of Ciribolla to obtain the claimed invention, because Ciribolla teaches a similar process to obtain a modified amino acid offers considerable advantages over other common amino acids such as: more easily assimilated in the duodenum and less susceptible to degradation of the ruminal bacterial flora; mix uniformly without the risk of compaction; compatible with vitamins, fats and minerals; and better absorption in the intestines (page 9).

Claims 30-32, 35 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ciribolla WO 00/53032, in view of Ashmead et al. US 6,458,981.

Ciribolla is relied upon for the reason stated above. Ciribolla does not explicitly teach salt of the bivalent metal.

Ashmead teaches a metal amino acid chelate prepared by reacting a calcium oxide or hydroxide, an amino acid, and a soluble metal sulfate salt in an aqueous environment at a ratio sufficient to allow substantially all of the ions present in solution to react forming a positively charged metal amino acid chelate having a hydroxide counter ion, a calcium sulfate salt, and optionally, water (abstract; and column 5, lines

Art Unit: 1615

55-60). Ashmead also teaches the amino acid used are preferably one or more of the naturally occurring amino acid including methionine (column 6, lines 15-20). Ashmead further teaches the use soluble metal sulfate salts include copper sulfate (CuSO_4), zinc sulfate (ZnSO_4), ferrous sulfate (FeSO_4), manganese sulfate (MnSO_4), cobalt sulfate (CoSO_4), magnesium sulfate (MgSO_4), ferric sulfate [$\text{Fe}_2 (\text{SO}_4)_3$], chromic sulfate [$\text{Cr}_2 (\text{SO}_4)_3$], and combination thereof (column 6, lines 25-30). Thus, it would have been obvious to one of ordinary skill in the art to react the MHA with the soluble metal sulfate salts in view of the teaching of Ashmead, because Ashmead teaches a process to modify amino acid to obtain a composition suitable for pharmaceutical/nutritional use, and because Ashmead teaches salt of metal is more soluble than the metal itself.

Response to Arguments

Applicant's arguments filed 02/21/07 have been fully considered but they are not persuasive.

Applicant argues that the teaching of Ciribolla clearly shows that the reaction is not free of undesirable by-products.

In response to applicant's argument that the reference does not show certain features of applicant's invention, it is noted that the feature upon which applicant relies (i.e., the reaction free of undesirable by-product) is not recited in the rejected claims. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Moreover, it is noted that Ciribolla teaches the reaction

Art Unit: 1615

is free from undesirable reaction by-product through out the patent (see for example abstract; and page 4).

Applicant argues that there is no motivation to combine Ciribolla and Ashmead, because Ashmead teaches methionine is an a-amino acid.

In response to applicant's argument, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Ashmead is relied upon solely for the teaching of soluble metal salt in the reaction.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan T. Tran whose telephone number is (571) 272-0606. The examiner can normally be reached on M-F 6:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward can be reached on (571) 272-8373. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1615

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to be 'S. Tran', with a stylized, flowing script.

S. Tran
Primary Examiner
Art Unit 1615